

HANDBOOK OF GERMAN BUSINESS MANAGEMENT

Volume 1 A–K

Edited by

Erwin Grochla
Managing Editor

Eduard Gaugler
Managing Editor

Hans E. Büschgen
Klaus Chmielewicz
Adolf G. Coenenberg
Werner Kern
Richard Köhler

Heribert Meffert
Marcell Schweitzer
Norbert Szyperski
Waldemar Wittmann
Klaus v. Wysocki

C. E. Poeschel Verlag Stuttgart

Springer-Verlag Berlin Heidelberg New York
London Paris Tokyo Hong Kong

Contents

Column numbers are indicated after each article title

Survey Articles

The Economic and Social Structure of the Federal Republic of Germany	1-34
<i>Horst Albach</i>	
Organisation of the Economy in the Federal Republic of Germany	35-56
<i>Erwin Grochla</i>	
The Structure of/and Institutions for Business Administration in German-Speaking Countries	57-78
<i>Eduard Gaugler</i>	

Subject Articles

Accounting	81-92	Business Accounting Principles and Standards	240-246
<i>Klaus Dellmann</i>		<i>Manfred Layer</i>	
Accounting for Planning and Control	92-102	Business Administration: History in German-Speaking Countries	246-270
<i>Michael Wohlgemuth</i>		<i>Horst Albach</i>	
Accounting Policy	102-112	Business Administration: Present Theoretical Approaches	270-291
<i>Günter Sieben</i>		<i>Günter Wöhe</i>	
ADP-Application Systems	112-126	Business Informatics	292-297
<i>Dietrich Seibt</i>		<i>Joachim Gries</i>	
Advanced Vocational Training	126-136	Business Policy, Business Politics	297-306
<i>Wolfgang Weber</i>		<i>Günter Dlugos</i>	
Advertising	136-144	Business Start-Up	306-314
<i>Werner Kroeber-Riel</i>		<i>Erich Zahn</i>	
Agricultural Management	144-153	Business Statistics	314-326
<i>Erwin Reisch</i>		<i>Eberhard Schaich</i>	
Annual Audit	153-166	Business Taxation	326-344
<i>Hans Havermann</i>		<i>Lutz Fischer</i>	
Appraisal System	166-173	Cameralistics	345-354
<i>Werner R. Müller</i>		<i>Karl Oettle</i>	
Assets	173-183	Capacity	354-363
<i>Edmund Heinen</i>		<i>Ludwig Pack</i>	
Audits	183-196	Capital Budgeting	363-373
<i>Erich Loitlsberger</i>		<i>Klaus Lüder</i>	
Banks and Banking System	197-210	Capital Budgeting Techniques	373-386
<i>Hans E. Büschgen</i>		<i>Bernd Rudolph</i>	
Bookkeeping	211-227	Capital Market	387-400
<i>Michael Heinhold</i>		<i>Wolfgang Gerke</i>	
Brand Policy	227-234	Capital Market Theory	400-412
<i>Ludwig Berekoven</i>		<i>Herbert Hax</i>	
Budgeting	234-240		
<i>Detlef Müller-Böling</i>			

Codetermination	412-428	Debt Capital	695-703
<i>Klaus Chmielewicz</i>		<i>Anton Egger</i>	
Collective Bargaining	428-440	Decision Theory	703-712
<i>Ernst Zander</i>		<i>Eberhard Witte</i>	
Commercial Accounts	441-451	Demand for Capital	712-724
<i>Klaus v. Wysocki</i>		<i>Wolfgang Eisele</i>	
Communication Systems	452-459	Development Projects	724-734
<i>Eberhard Witte</i>		<i>Karl-Heinz Sohn</i>	
Competition	459-466	Distribution	734-745
<i>Hermann Simon</i>		<i>Dieter Ahlert</i>	
Concepts of Profit	466-474	Division of Labour and Responsibilities . .	745-752
<i>Gerhard Scherrer</i>		<i>Arnold Picot</i>	
Consolidated Accounts	474-493	Early Warning Systems	753-764
<i>Walther Busse v. Colbe</i>		<i>Reinhart Schmidt</i>	
Consumers	494-509	Efficiency	764-775
<i>Hans Raffée</i>		<i>Franz Xaver Bea</i>	
Contractual Vertical Marketing Systems . .	509-518	Employee Shareholding	775-785
<i>Bruno Tietz</i>		<i>Günther Schanz</i>	
Contribution Costing	518-530	Employee Suggestion Schemes	785-796
<i>Wolfgang Kilger</i>		<i>Norbert Thom</i>	
Controllership	530-541	Employers' Associations	797-802
<i>Péter Horváth</i>		<i>Rolf Rodenstock</i>	
Conversion	542-548	Energy Supply	803-810
<i>Anton Heigl</i>		<i>Werner Kern</i>	
Cooperative Associations	548-557	Environmental Protection	810-820
<i>Ernst-Bernd Blümle</i>		<i>Heinz Strebel</i>	
Cooperative Management	557-569	† Equity Capital	820-829
<i>Wilfried Krüger</i>		<i>Jochen Drukarczyk</i>	
Coordination	570-580	Ergonomics	829-841
<i>Hans-Jürgen Drumm</i>		<i>Walter Rohmert</i>	
Corporate Governance	580-590	European Communities	842-852
<i>Horst Steinmann</i>		<i>Herbert Biener</i>	
Corporate Modelling	591-602	Evaluation Techniques	852-861
<i>Friedrich Rosenkranz</i>		<i>Winfried Matthes</i>	
Corporate Objectives	602-611	Expenses and Revenues	861-870
<i>Edmund Heinen</i>		<i>Helmut Kurt Weber</i>	
Cost Accounting	611-622	Export Promotion	870-876
<i>Gerhard Seicht</i>		<i>Hans Günther Meissner</i>	
★ Cost of Capital	622-630	Financial Accounting Theories	877-889
<i>Erich Swoboda</i>		<i>Marcell Schweitzer</i>	
Cost Estimating	630-641	Financial Analysis	889-898
<i>Herbert Vormbaum</i>		<i>Robert Buchner</i>	
Cost Management	641-652	Financial Management	899-906
<i>Lothar Streitferdt</i>		<i>Friedrich Thomée</i>	
Cost Theory	653-664	Financial Planning	906-924
<i>Marcell Schweitzer</i>		<i>Wolfgang Lücke</i>	
Customer Service	664-672	Financial Report	925-932
<i>Peter Hammann</i>		<i>Edgar Castan</i>	
Data Banks and Method Banks	673-682	Financial Statement Analysis	933-944
<i>Peter Mertens/Hartmut Wedekind</i>		<i>Adolf G. Coenenberg</i>	
Data Processing Management	682-694	Financing	945-957
<i>Dieter B. Pressmar</i>		<i>Hans E. Büschgen</i>	

Forecasting Techniques	957-972	Inventory Management	1240-1256
<i>Udo Winand</i>		<i>Wolfgang v. Zwehl</i>	
Foreign-Exchange Management	972-982	Job Design	1257-1265
<i>Helmut Lipfert</i>		<i>Ralf Reichwald</i>	
Forestry Management	983-990	Job Evaluation	1265-1276
<i>Werner Kroth</i>		<i>Rainer Marr</i>	
Fringe Benefits	990-1000	Labour Law	1277-1290
<i>Wolfgang H. Staehle</i>		<i>Reinhard Richardi</i>	
Funds Flow Statement	1000-1016	Labour Market and Unemployment	1291-1302
<i>Walther Busse v. Colbe</i>		<i>Gerhard Brinkmann</i>	
Generally Accepted Auditing Standards . .	1017-1028	Leadership	1302-1316
<i>Karl-Heinz Forster</i>		<i>Rolf Wunderer</i>	
Generating Alternatives	1028-1035	Leasing	1316-1322
<i>Jürgen Hauschildt</i>		<i>Winfried Mellwig</i>	
Group	1035-1044	Legal Forms of German Business	
<i>Werner Schubert</i>		Organisation	1323-1336
Hospital Management	1045-1056	<i>Marcus Lutter</i>	
<i>Dietrich Adam</i>		Legal Requirements for Production	1336-1347
Humanisation of Work	1056-1068	<i>Klaus Stüdemann</i>	
<i>Herbert Kubicek</i>		Liquidity	1348-1355
Implementation	1069-1079	<i>Wolfgang Stützel</i>	
<i>Eduard Gabele</i>		Loans and Credit	1355-1363
Industrial Firms	1079-1090	<i>Hans-Jacob Krümmel</i>	
<i>Dietger Hahn</i>		Logistics	1363-1376
Industrial Marketing	1090-1098	<i>Gösta B. Ihde</i>	
<i>Werner Hans Engelhardt</i>		Maintenance	1377-1385
Industrial Property Rights	1099-1106	<i>August-Wilhelm Scheer</i>	
<i>Hans-Horst Schröder</i>		Make or Buy	1385-1390
Industrial Sociology	1106-1118	<i>Friedrich Wilhelm Selchert</i>	
<i>Friedrich Fürstenberg</i>		Management	1390-1400
Inflation Accounting	1118-1130	<i>Knut Bleicher</i>	
<i>Thomas Schildbach</i>		Management Consultancy	1400-1410
Information Systems	1130-1144	<i>Günter Sieben</i>	
<i>Norbert Szyperski</i>		Marketing Planning	1410-1427
Innovation	1144-1158	<i>Richard Köhler</i>	
<i>Wilhelm Bierfelder</i>		Marketing Theory	1427-1443
Insolvency	1158-1167	<i>Heribert Meffert</i>	
<i>Wilhelm Uhlenbruck</i>		Market Research	1444-1454
Insurance	1167-1177	<i>Franz Böcker</i>	
<i>Dieter Farny</i>		Markets	1455-1460
Integrative Planning	1177-1189	<i>Heribert Meffert</i>	
<i>Dietger Hahn</i>		Materials Management	1460-1471
Inter-Firm Cooperation	1189-1199	<i>Oskar Grün</i>	
<i>Peter Schwarz</i>		Mechanisation and Automatisations	1471-1482
Inter-Firm and Intra-Firm Comparisons . .	1199-1208	<i>Erich Staudt</i>	
<i>Karl Vodrazka</i>		Merger	1482-1489
Internal Audit	1208-1219	<i>Ehrenfried Pausenberger</i>	
<i>André Zünd</i>		Motivation	1490-1499
International Accounting	1219-1230	<i>Gerhard Reber</i>	
<i>Klaus Macharzina</i>		* Multinational Corporations	1499-1512
International Marketing	1231-1240	<i>Martin K. Welge</i>	
<i>Hans Günther Meissner</i>			

Non-Profit Organisations	1513–1520	Portfolio Management	1787–1799
<i>Karl Oettle</i>		<i>Aloys Gälweiler</i>	
Occupational Safety	1521–1529	Pricing Policy	1799–1815
<i>Peter C. Compes</i>		<i>Herbert Jacob</i>	
Office Management	1530–1538	Principles of Proper Bookkeeping and Accounting	1816–1834
<i>Herbert Kraus</i>		<i>Jörg Baetge</i>	
Old Age Benefits	1538–1550	Privacy and Data Security	1834–1842
<i>Georg Heubeck</i>		<i>Rainer Thome</i>	
Operational Research Applications	1550–1564	Private Limited Company	1842–1850
<i>Heiner Müller-Merbach</i>		<i>Manfred Jürgen Matschke</i>	
Operational Research Modelling	1564–1575	Process Organisation and Scheduling	1850–1862
<i>Werner Dinkelbach</i>		<i>Hans-Ulrich Küpper</i>	
Organisational Culture	1575–1581	Procurement	1862–1876
<i>Alfred Kieser</i>		<i>Horst Glaser</i>	
Organisational Design	1581–1593	Product Design	1877–1887
<i>Erwin Grochla</i>		<i>Hans Siegwart</i>	
Organisational Development	1593–1601	Production	1887–1896
<i>Hartmut Wächter</i>		<i>Werner Kern</i>	
Organisational Forms	1601–1617	Production Planning and Control	1897–1907
<i>Knut Bleicher</i>		<i>Helmut Wagner</i>	
Organisational Structure	1617–1626	Production Processes	1907–1921
<i>Friedrich Hoffmann</i>		<i>Kurt Bohr</i>	
Organisational Techniques	1626–1633	Production Theory	1921–1938
<i>Robert Fieten</i>		<i>Waldemar Wittmann</i>	
Organisation Theory	1634–1648	Product-Mix Planning	1938–1953
<i>Erwin Grochla</i>		<i>Hermann Sabel</i>	
Partnerships and Sole Traders	1649–1657	Profit and Loss Account	1954–1967
<i>Otto H. Jacobs</i>		<i>Klaus Chmielewicz</i>	
Payments Transactions and Clearing Systems	1657–1670	Profit and Loss Appropriation	1967–1975
<i>Wolfgang Benner</i>		<i>Ralf-Bodo Schmidt</i>	
Personnel Costs	1670–1680	Profit Sharing	1976–1985
<i>Eduard Gaugler</i>		<i>Eduard Gaugler</i>	
Personnel Information Systems	1681–1695	Project Management	1985–1995
<i>Michel Domsch</i>		<i>Erich Frese</i>	
Personnel Management	1695–1705	Psychology of Industrial Organisations	1995–2009
<i>Jürgen Berthel</i>		<i>Lutz v. Rosenstiel</i>	
Personnel Planning	1705–1720	Public Aid for Small and Medium-Sized Firms	2010–2017
<i>Wolfgang Mag</i>		<i>Erwin Dichtl</i>	
Personnel Policy	1720–1732	Public Auditing	2018–2031
<i>Dudo v. Eckardstein</i>		<i>Klaus v. Wysocki</i>	
Planning Systems	1732–1743	Public Authority	2032–2041
<i>Edwin Rühli</i>		<i>Peter Eichhorn</i>	
Plant Closure	1744–1753	Public Limited Company	2041–2054
<i>Thomas Raiser</i>		<i>Eberhard Dülfer</i>	
Plant Location	1753–1765	Public Procurement	2054–2062
<i>Jürgen Bloech</i>		<i>Helmut Diederich</i>	
Plant Management	1765–1777	Public Relations	2063–2072
<i>Wolfgang Männel</i>		<i>Volker Trommsdorff</i>	
Plant Models	1777–1787	Quality Control	2073–2082
<i>Gert Laßmann</i>		<i>Horst Wildemann</i>	

Rationalisation	2085-2092	Subsidies	2298-2307
<i>Marcell Schweitzer</i>		<i>Karl Alewell</i>	
Ratios	2092-2104	Supervision	2307-2313
<i>Thomas Reichmann</i>		<i>Alfred Kuhn</i>	
Reconstruction	2104-2111	Systems Theory	2314-2332
<i>Johann Heinrich v. Stein</i>		<i>Helmut Lehmann</i>	
Recycling	2111-2119	Tax Balance Sheet	2333-2340
<i>Erich Staudt</i>		<i>Franz W. Wagner</i>	
Research and Development	2120-2134	Tax Planning	2340-2351
<i>Klaus Brockhoff</i>		<i>Gerd Rose</i>	
Research Methods in Business		Technology Transfer	2351-2362
Administration	2134-2149	<i>Hans H. Hinterhuber</i>	
<i>Richard Köhler</i>		Tourism	2362-2367
Restraint of Trade	2149-2160	<i>Josef Mazanec</i>	
<i>Günther Bernert</i>		Trade and Craft	2368-2377
Sales Management	2161-2168	<i>Peter Rütger Wossidlo</i>	
<i>Joachim Zentes</i>		Trade Unions	2377-2397
Sales Promotion	2169-2178	<i>Ekkehard Kappler</i>	
<i>Hermann Diller</i>		Trading Enterprises	2397-2409
Service Industry	2178-2187	<i>Fritz Klein-Blenkers</i>	
<i>Wilhelm Hill</i>		Transport Corporations	2409-2420
Short-Term Operational Accounting	2187-2194	<i>Paul Riebel</i>	
<i>Dietrich Börner</i>		Valuation	2421-2433
Size of the Firm	2194-2203	<i>Helmut Koch</i>	
<i>Horst Seelbach</i>		Valuation of a Going Concern	2433-2444
Social Accounting	2203-2213	<i>Adolf Moxter</i>	
<i>Adolf G. Coenenberg</i>		Vocational Training	2445-2456
Social Legislation	2213-2225	<i>Heinrich Schanz</i>	
<i>Georg Wannagat</i>		Wage-Payment Systems	2457-2472
Standard Chart of Accounts	2225-2235	<i>Karl-Friedrich Ackermann</i>	
<i>Walter Endres</i>		Wage and Salary Policy	2472-2482
Standard Costing	2235-2249	<i>Hugo Kossbiel</i>	
<i>Josef Kloock</i>		Working Time	2482-2492
Standardisation	2249-2258	<i>Dieter Sadowski</i>	
<i>Hartmut Kreikebaum</i>		Work Structuring	2492-2502
State-Owned Enterprises	2259-2269	<i>Hans Blohm</i>	
<i>Theo Thiemeyer</i>		Author Index	2505-2554
Strategic Analysis	2269-2282	Subject Index	2557-2620
<i>Hans-Christian Pfohl</i>		Contributors' Addresses	2621-2638
Strategic Management	2283-2292		
<i>Werner Kirsch</i>			
Subject Matter of Business Administration	2292-2298		
<i>Hans Ulrich</i>			

List of Contributors

Column numbers are indicated after each article title.
For contributors' addresses, see pp. 2621-2638

<i>Ackermann, Karl-Friedrich</i> Prof. Dr. Wage-Payment Systems	2457-2472	<i>Börner, Dietrich</i> Prof. Dr. Short-Term Operational Accounting . .	2187-2194
<i>Adam, Dietrich</i> Prof. Dr. Hospital Management	1045-1056	<i>Brinkmann, Gerhard</i> Prof. Dr. Labour Market and Unemployment . .	1291-1302
<i>Ahlert, Dieter</i> Prof. Dr. Distribution	734-745	<i>Brockhoff, Klaus</i> Prof. Dr. Research and Development	2120-2134
<i>Albach, Horst</i> Prof. Dr. Dr. h. c. mult. The Economic and Social Structure of the Federal Republic of Germany	1-34	<i>Buchner, Robert</i> Prof. Dr. Financial Analysis	889-898
Business Administration: History in German Speaking Countries	246-270	<i>Büschgen, Hans E.</i> Prof. Dr. Banks and Banking System	197-210
<i>Alewell, Karl</i> Prof. Dr. Dr. h. c. Subsidies	2298-2307	Financing	945-957
<i>Baetge, Jörg</i> Prof. Dr. Principles of Proper Bookkeeping . . .	1816-1834	<i>Busse v. Colbe, Walther</i> Prof. Dr. Dr. h. c. Consolidated Accounts	474-493
<i>Bea, Franz Xaver</i> Prof. Dr. Efficiency	764-775	Funds Flow Statement	1000-1016
<i>Benner, Wolfgang</i> Prof. Dr. Payment Transactions and Clearing Systems	1657-1670	<i>Castan, Edgar</i> Prof. Dr. Financial Report	925-932
<i>Berekoven, Ludwig</i> Prof. Dr. Brand Policy	227-234	<i>Chmielewicz, Klaus</i> Prof. Dr. Codetermination	412-428
<i>Bernert, Günther</i> Prof. Dr. Restraint of Trade	2149-2160	Profit and Loss Account	1954-1967
<i>Berthel, Jürgen</i> Prof. Dr. Personnel Management	1695-1705	<i>Coenenberg, Adolf G.</i> Prof. Dr. Financial Statement Analysis	933-944
<i>Biener, Herbert</i> Ministerialrat European Communities	842-852	Social Accounting	2203-2213
<i>Bierfelder, Wilhelm</i> Prof. Dr. Innovation	1144-1158	<i>Compes, Peter C.</i> Prof. Dr. Occupational Safety	1521-1529
<i>Bleicher, Knut</i> Prof. Dr. Management	1390-1400	<i>Dellmann, Klaus</i> Prof. Dr. Accounting	81-92
Organisational Forms	1601-1617	<i>Dichtl, Erwin</i> Prof. Dr. Public Aid for Small and Medium- Sized Firms	2010-2017
<i>Bloech, Jürgen</i> Prof. Dr. Plant Location	1753-1765	<i>Diederich, Helmut</i> Prof. Dr. Public Procurement	2054-2062
<i>Blohm, Hans</i> Prof. Dr. Work Structuring	2492-2502	<i>Diller, Hermann</i> Prof. Dr. Sales Promotion	2169-2178
<i>Blümle, Ernst Bernd</i> Prof. Dr. Cooperative Associations	548-557	<i>Dinkelbach, Werner</i> Prof. Dr. Operational Research Modelling	1564-1575
<i>Böcker, Franz</i> Prof. Dr. Market Research	1444-1454	<i>Đlugos, Günter</i> Prof. Dr. Business Policy, Business Politics	297-306
<i>Bohr, Kurt</i> Prof. Dr. Production Processes	1907-1921	<i>Domsch, Michel</i> Prof. Dr. Personnel Information Systems	1681-1695
		<i>Drukarczyk, Jochen</i> Prof. Dr. Equity Capital	820-829
		<i>Drumm, Hans Jürgen</i> Prof. Dr. Coordination	570-580

<i>Dülfer, Eberhard</i> Prof. Dr. Public Limited Company	2041-2054	<i>Hahn, Dietger</i> Prof. Dr. Industrial Firms	1079-1090
<i>v. Eckardstein, Dudo</i> Prof. Dr. Personnel Policy	1720-1732	Integrative Planning	1177-1189
<i>Egger, Anton</i> Prof. Dr. Debt Capital	695-703	<i>Hammann, Peter</i> Prof. Dr. Customer Service	664-672
<i>Eichhorn, Peter</i> Prof. Dr. Public Authority	2032-2041	<i>Hauschildt, Jürgen</i> Prof. Dr. Generating Alternatives	1028-1035
<i>Eisele, Wolfgang</i> Prof. Dr. Demand for Capital	712-724	<i>Havermann, Hans</i> Prof. Dr. Annual Audit	153-166
<i>Endres, Walter</i> Prof. Dr. Standard Chart of Accounts	2225-2235	<i>Hax, Herbert</i> Prof. Dr. Capital Market Theory	400-412
<i>Engelhardt, Werner Hans</i> Prof. Dr. Industrial Marketing	1090-1098	<i>Heigl, Anton</i> Prof. Dr. Conversion	542-548
<i>Farny, Dieter</i> Prof. Dr. Insurance	1167-1177	<i>Heinen, Edmund</i> Prof. Dr. Dr. h. c. mult. Assets	173-183
<i>Fieten, Robert</i> Dr. Organisational Techniques	1626-1633	Corporate Objectives	602-611
<i>Fischer, Lutz</i> Prof. Dr. Business Taxation	326-344	<i>Heinhold, Michael</i> Prof. Dr. Bookkeeping	211-227
<i>Forster, Karl-Heinz</i> Prof. Dr. Dr. h. c. Generally Accepted Auditing Standards	1017-1028	<i>Heubeck, Georg</i> Prof. Dr. Old Age Benefits	1538-1550
<i>Frese, Erich</i> Prof. Dr. Project Management	1985-1995	<i>Hill, Wilhelm</i> Prof. Dr. Dr. h. c. Service Industry	2178-2187
<i>Fürstenberg, Friedrich</i> Prof. Dr. Industrial Sociology	1106-1118	<i>Hinterhuber, Hans H.</i> Prof. Dr. Technology Transfer	2351-2362
<i>Gabele, Eduard</i> Prof. Dr. Implementation	1069-1079	<i>Hoffmann, Friedrich</i> Prof. Dr. Organisational Structure	1617-1626
<i>Gälweiler, Aloys</i> Prof. Dr. Portfolio Management	1787-1799	<i>Horváth, Péter</i> Prof. Dr. Controllershship	530-541
<i>Gaugler, Eduard</i> Prof. Dr. Dr. h. c. The Structure of/and Institutions for Business Administration in German-Speaking Countries	57-78	<i>Ihde, Gösta B.</i> Prof. Dr. Logistics	1363-1376
Personnel Costs	1670-1680	<i>Jacob, Herbert</i> Prof. Dr. Dr. h. c. Pricing Policy	1799-1815
Profit Sharing	1976-1985	<i>Jacobs, Otto H.</i> Prof. Dr. Partnerships and Sole Traders	1649-1657
<i>Gerke, Wolfgang</i> Prof. Dr. Capital Market	387-400	<i>Kappler, Ekkehard</i> Prof. Dr. Trade Unions	2377-2397
<i>Glaser, Horst</i> Prof. Dr. Procurement	1862-1876	<i>Kern, Werner</i> Prof. Dr. Energy Supply	803-810
<i>Griese, Joachim</i> Prof. Dr. Business Informatics	292-297	Production	1887-1896
<i>Grochla, Erwin</i> Prof. Dr. Dr. h. c. mult. Organisation of the Economy in the Federal Republic of Germany	35-56	<i>Kieser, Alfred</i> Prof. Dr. Organisational Culture	1575-1581
Organisational Design	1581-1593	<i>Kilger, Wolfgang</i> Prof. Dr. Contribution Costing	518-530
Organisation Theory	1634-1648	<i>Kirsch, Werner</i> Prof. Dr. Strategic Management	2283-2292
<i>Grün, Oskar</i> Prof. Dr. Materials Management	1460-1471	<i>Klein-Blenkers, Fritz</i> Prof. Dr. Trading Enterprises	2397-2409
		<i>Kloock, Josef</i> Prof. Dr. Standard Costing	2235-2249

<i>Koch, Helmut</i> Prof. Dr. Dr. h. c. Valuation	2421-2433	<i>Marr, Rainer</i> Prof. Dr. Job Evaluation	1265-1276
<i>Köhler, Richard</i> Prof. Dr. Marketing Planning Research Methods in Business Administration	1410-1427 2134-2149	<i>Matschke, Manfred Jürgen</i> Prof. Dr. Private Limited Company	1842-1850
<i>Kossbiel, Hugo</i> Prof. Dr. Wage and Salary Policy	2472-2482	<i>Matthes, Winfried</i> Prof. Dr. Evaluation Techniques	852-861
<i>Kraus, Herbert</i> Prof. Dr. Office Management	1530-1538	<i>Mazanec, Josef</i> Prof. Dr. Tourism	2362-2367
<i>Kreikebaum, Hartmut</i> Prof. Dr. Standardisation	2249-2258	<i>Meffert, Heribert</i> Prof. Dr. Marketing Theory Markets	1427-1443 1455-1460
<i>Kroeber-Riel, Werner</i> Prof. Dr. Advertising	136-144	<i>Meissner, Hans Günther</i> Prof. Dr. Export Promotion International Marketing	870-876 1231-1240
<i>Kroth, Werner</i> Prof. Dr. Forestry Management	983-990	<i>Mellwig, Winfried</i> Prof. Dr. Leasing	1316-1322
<i>Krüger, Wilfried</i> Prof. Dr. Cooperative Management	557-569	<i>Mertens, Peter</i> Prof. Dr. Data Banks and Method Banks	673-682
<i>Krümmel, Hans-Jacob</i> Prof. Dr. Dr. h. c. Loans and Credit	1355-1363	<i>Moxter, Adolf</i> Prof. Dr. Valuation of a Going Concern	2433-2444
<i>Kubicek, Herbert</i> Prof. Dr. Humanisation of Work	1056-1068	<i>Müller, Werner R.</i> Prof. Dr. Appraisal System	166-173
<i>Kuhn, Alfred</i> Prof. Dr. Supervision	2307-2313	<i>Müller-Böling, Detlef</i> Prof. Dr. Budgeting	234-240
<i>Küpper, Hans-Ulrich</i> Prof. Dr. Process Organisation and Scheduling	1850-1862	<i>Müller-Merbach, Heiner</i> Prof. Dr. Operational Research Applications	1550-1564
<i>Laßmann, Gert</i> Prof. Dr. Plant Models	1777-1787	<i>Oettle, Karl</i> Prof. Dr. Cameralistics Non-Profit Organisations	345-354 1512-1520
<i>Layer, Manfred</i> Prof. Dr. Business Accounting Principles and Standards	240-246	<i>Pack, Ludwig</i> Prof. Dr. MBA Capacity	354-363
<i>Lehmann, Helmut</i> Dr. Systems Theory	2314-2332	<i>Pausenberger, Ehrenfried</i> Prof. Dr. Merger	1482-1489
<i>Lipfert, Helmut</i> Prof. Dr. Foreign-Exchange Management	972-982	<i>Pfohl, Hans-Christian</i> Prof. Dr. Strategic Analysis	2269-2282
<i>Loitsberger, Erich</i> Prof. Dr. Dr. h. c. Audits	183-196	<i>Picot, Arnold</i> Prof. Dr. Division of Labour and Responsibilities	745-752
<i>Lücke, Wolfgang</i> Prof. Dr. Financial Planning	906-924	<i>Pressmar, Dieter B.</i> Prof. Dr. Data Processing Management	682-694
<i>Lüder, Klaus</i> Prof. Dr. Capital Budgeting	363-373	<i>Raffée, Hans</i> Prof. Dr. Consumers	494-509
<i>Lutter, Marcus</i> Prof. Dr. Legal Forms of German Business Organisation	1323-1336	<i>Raiser, Thomas</i> Prof. Dr. Plant Closure	1744-1753
<i>Macharzina, Klaus</i> Prof. Dr. International Accounting	1219-1230	<i>Reber, Gerhard</i> Prof. Dr. MBA Motivation	1490-1499
<i>Mag, Wolfgang</i> Prof. Dr. Personnel Planning	1705-1720	<i>Reichmann, Thomas</i> Prof. Dr. Ratios	2092-2104
<i>Männel, Wolfgang</i> Prof. Dr. Plant Management	1765-1777	<i>Reichwald, Ralf</i> Prof. Dr. Job Design	1257-1265

<i>Reisch, Erwin</i> Prof. Dr. Dr. h. c. Agricultural Management	144-153	<i>Seelbach, Horst</i> Prof. Dr. Size of the Firm	2194-2203
<i>Richardi, Reinhard</i> Prof. Dr. Labour Law	1277-1290	<i>Seibt, Dietrich</i> Prof. Dr. ADP-Application Systems	112-126
<i>Riebel, Paul</i> Prof. Dr. Dres. h. c. Transport Corporations	2409-2420	<i>Seicht, Gerhard</i> Prof. Dr. Cost Accounting	611-622
<i>Rodenstock, Rolf</i> Prof. Dr. Dr. h. c. Employers' Associations	797-802	<i>Selchert, Friedrich Wilhelm</i> Prof. Dr. Make or Buy	1385-1390
<i>Rohmert, Walter</i> Prof. Dr. Ergonomics	829-841	<i>Sieben, Günter</i> Prof. Dr. Accounting Policy	102-112
<i>Rose, Gerd</i> Prof. Dr. Tax Planning	2340-2351	<i>Simon, Hermann</i> Prof. Dr. Management Consultancy	1400-1410
<i>Rosenkranz, Friedrich</i> Prof. Dr. Corporate Modelling	591-602	<i>Siegmund, Hans</i> Prof. Dr. Product Design	1877-1887
<i>v. Rosenstiel, Lutz</i> Prof. Dr. Psychology of Industrial Organisations	1995-2009	<i>Simon, Hermann</i> Prof. Dr. Competition	459-466
<i>Rudolph, Bernd</i> Prof. Dr. Capital Budgeting Techniques	373-386	<i>Sohn, Karl-Heinz</i> Prof. Dr. Development Projects	724-734
<i>Rühli, Edwin</i> Prof. Dr. Planning Systems	1732-1743	<i>Staehle, Wolfgang H.</i> Prof. Dr. Fringe Benefits	990-1000
<i>Sabel, Hermann</i> Prof. Dr. Product-Mix Planning	1938-1953	<i>Staudt, Erich</i> Prof. Dr. Mechanisation and Automatisations	1471-1482
<i>Sadowski, Dieter</i> Prof. Dr. Working Time	2482-2492	<i>Staudt, Erich</i> Prof. Dr. Recycling	2111-2119
<i>Schaich, Eberhard</i> Prof. Dr. Business Statistics	314-326	<i>v. Stein, Johann Heinrich</i> Prof. Dr. Reconstruction	2104-2111
<i>Schanz, Günther</i> Prof. Dr. Employee Shareholding	775-785	<i>Steinmann, Horst</i> Prof. Dr. Corporate Governance	580-590
<i>Schanz, Heinrich</i> Prof. Dr. Vocational Training	2445-2456	<i>Strebel, Heinz</i> Prof. Dr. Environmental Protection	810-820
<i>Scheer, August-Wilhelm</i> Prof. Dr. Maintenance	1377-1385	<i>Streitferdt, Lothar</i> Prof. Dr. Cost Management	641-652
<i>Scherrer, Gerhard</i> Prof. Dr. Concepts of Profits	466-474	<i>Stüdemann, Klaus</i> Prof. Dr. Legal Requirements for Production	1336-1347
<i>Schildbach, Thomas</i> Prof. Dr. Inflation Accounting	1118-1130	<i>Stützel, Wolfgang</i> Prof. Dr. Liquidity	1348-1355
<i>Schmidt, Ralf-Bodo</i> Prof. Dr. Profit and Loss Appropriation	1967-1975	<i>Swoboda, Peter</i> Prof. Dr. Cost of Capital	622-630
<i>Schmidt, Reinhart</i> Prof. Dr. Early Warning Systems	753-764	<i>Szyperski, Norbert</i> Prof. Dr. Information Systems	1130-1144
<i>Schröder, Hans-Horst</i> Dr. Industrial Property Rights	1099-1106	<i>Thiemeyer, Theo</i> Prof. Dr. State-Owned Enterprises	2259-2269
<i>Schubert, Werner</i> Prof. Dr. Group	1035-1044	<i>Thom, Norbert</i> Prof. Dr. Employee Suggestion Schemes	785-796
<i>Schwarz, Peter</i> Priv. Doz. Dr. Inter-Firm Cooperation	1189-1199	<i>Thome, Rainer</i> Prof. Dr. Privacy and Data Security	1834-1842
<i>Schweitzer, Marcell</i> Prof. Dr. Cost Theory	653-664	<i>Thomé, Friedrich</i> Prof. Dr. Financial Management	899-906
<i>Schweitzer, Marcell</i> Prof. Dr. Financial Accounting Theories	877-889	<i>Tietz, Bruno</i> Prof. Dr. Contractual Vertical Marketing Systems	509-518
<i>Schweitzer, Marcell</i> Prof. Dr. Rationalisation	2085-2092	<i>Trommsdorff, Volker</i> Prof. Dr. Public Relations	2063-2072

<i>Uhlenbruck, Wilhelm</i> Prof. Dr. Insolvency	1158-1167	<i>Witte, Eberhard</i> Prof. Dr. Dres. h. c. Communication Systems	452-459
<i>Ulrich, Hans</i> Prof. Dr. Dr. h. c. mult. Subject Matter of Business Administration	2292-2298	Decision Theory	703-712
<i>Vodrazka, Karl</i> Prof. Dr. Inter-Firm and Intra-Firm Comparisons	1199-1208	<i>Wittmann, Waldemar</i> Prof. Dr. Dres. h. c. Production Theory	1921-1938
<i>Vormbaum, Herbert</i> Prof. Dr. Cost Estimating	630-641	<i>Wöhe, Günter</i> Prof. Dr. Dres. h. c. Business Administration: Present Theoretical Approaches	270-291
<i>Wächter, Hartmut</i> Prof. Dr. Organisational Development	1593-1601	<i>Wohlgemuth, Michael</i> Prof. Dr. Accounting for Planning and Control . . .	92-102
<i>Wagner, Franz W.</i> Prof. Dr. Tax Balance Sheet	2333-2340	<i>Wossidlo, Peter Rütger</i> Prof. Dr. Trade and Craft	2368-2377
<i>Wagner, Helmut</i> Prof. Dr. Production Planning and Control	1897-1907	<i>Wunderer, Rolf</i> Prof. Dr. Leadership	1302-1316
<i>Wannagat, Georg</i> Prof. Dr. Social Legislation	2213-2225	<i>v. Wysocki, Klaus</i> Prof. Dr. Commercial Accounts	441-451
<i>Weber, Helmut Kurt</i> Prof. Dr. Expenses and Revenues	861-870	Public Auditing	2018-2031
<i>Weber, Wolfgang</i> Prof. Dr. Advanced Vocational Training	126-136	<i>Zahn, Erich</i> Prof. Dr. Business Start-Up	306-314
<i>Wedekind, Hartmut</i> Prof. Dr. Data Bank and Method Banks	673-682	<i>Zander, Ernst</i> Prof. Dr. Collective Bargaining	428-440
<i>Welge, Martin K.</i> Prof. Dr. Multinational Corporations	1499-1512	<i>Zentes, Joachim</i> Prof. Dr. Sales Management	2161-2168
<i>Wildemann, Horst</i> Prof. Dr. Quality Control	2073-2082	<i>Zünd, André</i> Prof. Dr. Internal Audit	1208-1219
<i>Winand, Udo</i> Dr. Forecasting Techniques	957-972	<i>v. Zwehl, Wolfgang</i> Prof. Dr. Inventory Management	1240-1256

niques; Organisation Theory; Plant Location; Process Organisation and Scheduling; Production; Strategic Management; Work Structuring]

I. Definition; II. Contributions from Economics in German-Speaking Countries; III. Contributions from Business Administration in German-Speaking Countries; IV. Consequences of Division of Labour.

I. Definition

The term “division of labour” is often used in economic and sociological discussion. The term “division of responsibilities” on the other hand is most commonly used in the field of business administration. From a sociological point of view *Dahrendorf* (1965) distinguishes between a narrower and a wider sense of a division of labour. The narrower definition is used to denote the economic division of labour between individuals, while the wider understanding of the term is related to aspects of social differentiation in society.

II. Contributions from Economics in German-Speaking Countries

1. Division of Labour in the National Economy Around the Turn of the Century

Schmoller (1900) attempts to describe the historical development of labour division at the national economic level. For instance, he sees the emergence of professional occupations and the working classes as a logically consistent development from the corresponding earlier social structures (clergy/aristocracy and slavery/serfdom). He proves the productivity of commerce on the basis of the division of labour between agriculture and trades.

For *Bücher* (1898), labour division is a much narrower term. He describes it as a further mechanism for → *Coordination* in addition to the combination of labour and the teamwork, and he classifies it as a concept which can be subsumed under the heading of work structuring. In his writings, the division of labour appears in the form of production division (→ *Production*; → *Production Theory*), task analysis, specialisation, development of occupations and job displacement. Task analysis is regarded to be the prerequisite for the effectiveness of the law of mass production developed by *Bücher* (1918) (economies of scale → *Cost Theory*).

2. The New International Division of Labour

One more recent investigation which has received much attention has been about structural unemployment in the industrialised countries (→ *Labour Market*

Division of Labour and Responsibilities

Arnold Picot

[see also: Business Administration: History in German-Speaking Countries; Coordination; Humanisation of Work; Industrial Firms; Organisational Design; Organisational Structure; Organisational Tech-

and *Unemployment*) and the industrialisation of the developing countries. It begins at the level of international economics as regards the division of labour (Fröbel/Heinrichs/Kreye 1977 - engl. transl. 1978). The authors have set three essential conditions for the validity of their theses, which are partially based on empirical research: a cheap labour force in the developing countries, fragmentation of the production process, and availability of efficient transport and communication technology.

Once these requirements have been met, they say, there is a world labour market (→ *Labour Market and Unemployment*) and production site market (→ *Plant Location*) with a corresponding burden of the labour markets in the industrialised countries. The observation of this qualitatively new phenomenon has caused the authors to talk of a new international division of labour.

3. Further Development of Division of Labour

Based on extensive field research Kern/Schumann (1984) developed the intensively debated (Osterloh 1986) hypothesis that, due to new technologies and new forms of work organisation, the division of labour in industrial production is vanishing. More autonomous and holistic work structures can emerge with higher qualified jobs. This decline of tayloristic division of labour would also mean that less qualified workers will have less chances to become employed. This would produce a new segmentation of the labour market. Similar observations are reported from the large field of office work with new office technologies (Picot/Reichwald 1987: → *Office Management*; → *Mechanisation and Automation*).

III. Contributions from Business Administration in German-Speaking Countries

1. Task Structuring as a Central Concern of Organisation Theory

For Nordsieck (1934), one of the co-founders of modern → *Organisation Theory*, tasks represented the starting point and the ultimate goal of all organisational efforts. The various sub-tasks are interrelated because they were derived from the basic task as substantive objective (nowadays this is often termed strategy; → *Strategic Management*). The division of responsibilities is intended to reflect this interrelationship in a meaningful way. The responsibilities can be divided according to activities or products, whereby it is possible to have a case where both organisational criteria can be applied equally.

Task structuring is the basis of the task assignment and connection of tasks, as laid down in the → *Organisational Structure*. The structuring according to activities and products as well as the exclusion and concen-

tration of administrative tasks are the principles of task structuring. The connection between corporate tasks or strategy and organisational arrangements shows the affinity between the work of Nordsieck and more recent approaches to → *Organisation Theory* concerning the relationship between the task environment and organisational structure (e.g. Burns/Stalker 1961; Chandler 1962; Lawrence/Lorsch 1969).

Nordsieck sees task structuring as being carried out ideally as pure process structuring, thereby linking this to dispatching in terms of process organisation (→ *Process Organisation and Scheduling*). This is intended to make it possible to balance the work of individual work stations or groups. According to Nordsieck, the workloads must be made equal and brought into line with normal requirements, with speed and rhythm being coordinated at the same time. This is an aspect about which he made detailed observations.

In addition to the task concept, the function concept plays a significant part in the academic development of this area. Other authors besides Nordsieck have dealt with these issues, sometimes expressing divergent opinions (e.g. Stefanic-Allmayer 1950; Schnutenhaus 1951; Acker 1956; Meier 1957; Böhrs 1963).

2. Task/Work Analysis and Synthesis

Kosiol (1962) provided new impetus for questions concerning the division of responsibilities, and this is still relevant today. For him, the corporate structure (→ *Organisational Structure*; → *Organisational Design*) is arranged with *task analysis* (task structuring) being an independent thought process and one step ahead of task synthesis. Sub-tasks are structured according to the various characteristics of activity, product, rank (decision or execution), phase (planning, realisation or control) and purpose (endogenous or exogenous tasks). Only one characteristic may be used at any one stage of structuring in order to allow the complicated task structure to remain clear.

The *task synthesis* is concerned with combining tasks from the view of their execution by task stations and leads to a combination of analytical sub-tasks being joined together to form structured units.

After the task analysis has been broken off at the point where the sub-tasks can be allocated to individuals, the work analysis can be interpreted as an extended performance-related task analysis. Together with the work synthesis it forms the methodical operation of process structuring (→ *Process Organisation and Scheduling*). In contrast to Nordsieck, who repeatedly refers to the connections and interdependencies between organisational structure and process organisation, Kosiol clearly distinguishes between these two aspects. Work synthesis follows on from work analysis in the same way that task synthesis follows on from task analysis. Work synthesis forms individual operations (→ *Work Structuring*) for established work stations.

Most recently, some authors have shown renewed

interest in questions concerning task and work analysis. While *Krüger* (1981) sees a renaissance for the techniques of task analysis (→ *Organisational Techniques*), *Berg* (1981) considers such a task decomposition as a further approach to → *Organisational Design*. In principle, this is a basic modification of the concept of analysis and synthesis put forward by *Kosiol*, using formal mathematical methods in particular. The concept of decomposition allows at any stage of the structuring procedure an integrated analysis and synthesis of tasks in four steps (generating system elements, deriving interdependencies within the socio-technical system, testing consistency and, if required, correction of the design).

It was *Gaitanides* (1983) who developed a process-oriented organisational design where the first stage is a pre-organisational process analysis. After this, the process elements are allocated to various coordinated stations and the production processes can be coordinated among one another. For him, as for a large section of the publications which have appeared since the early sixties, the influence of *Kosiol's* concept of analysis/synthesis is evident, although the distinction between → *Organisational Structure* and process organisation was not always adopted and was even watered down to some extent.

An integrated examination of the problem of labour and responsibility division as well as the problem of structure and process is assuming increasing importance in both the German- and English-speaking countries as far as the efforts at organisational description and design are concerned (e.g. *Mintzberg* 1979; *Hill/Fehlbaum/Ulrich* 1982; *Kieser/Kubicek* 1983).

IV. Consequences of Division of Labour

Research and debates on the consequences of division of labour have been conducted since its introduction to industry. The number of authors who have written on the subject is correspondingly large. The economic advantages of a division of labour are particularly evident in the possibility of specialised knowledge and skills being used, in a more rapid development of learning effects, in shorter training periods, and also in making it easier in certain circumstances to obtain a workforce. However, if division of labour is carried to an extreme, it can lead to decreased adaptability as well as to an increased need for coordination; it can also run counter to social objectives. Physical and psychological symptoms of fatigue and alienation among employees can emerge. Thus the economic advantages of labour division can conflict with serious disadvantages (→ *Corporate Objectives*; → *Humanisation of Work*). *Reber* (1974) has brought together the hypotheses developed on this subject in the literature and created the basis for a theory of the lower limit for the division of labour.

Bibliography

a) Introductory Reading

- Dahrendorf, Ralf* (1965): Arbeitsteilung, Soziologische Betrachtung. In: v. *Beckerath, E.* et al. (eds.): Handwörterbuch der Sozialwissenschaften. Vol. 12, Göttingen (Vandenhoeck & Ruprecht), 512-517.
- Kosshiel, Hugo* (1974): Arbeitsteilung, betriebliche. In: *Grochla, E./Wittmann, W.* (eds.): Handwörterbuch der Betriebswirtschaft. 4th ed., Stuttgart (Poeschel), 256-262.
- Picot, Arnold* (1979): Organisationsprinzipien. In: Wirtschaftswissenschaftliches Studium, 8: 480-485.
- Reber, Gerhard* (1974): Die minimale personale Arbeitsaufgabe. In: Wirtschaftswissenschaftliches Studium, 3: 217-223.
- Schweitzer, Marcell* (1980): Arbeitsteilung. In: *Grochla, E.* (ed.): Handwörterbuch der Organisation. 2nd ed., Stuttgart (Poeschel), 139-144.

b) Further Reading

- Acker, Heinrich* (1956): Die organisatorische Stellengliederung im Betrieb. Wiesbaden (Gabler).
- Berg, Claus C.* (1981): Organisationsgestaltung. Stuttgart et al. (Kohlhammer).
- Böhrs, Hermann* (1963): Organisation des Industriebetriebes. Wiesbaden (Gabler).
- Bücher, Karl* (1898): Die Entstehung der Volkswirtschaft. Vol. 1, 2nd ed., Tübingen (Laupp).
- Bücher, Karl* (1918): Die Entstehung der Volkswirtschaft. Vol. 2, 1st ed., Tübingen (Laupp).
- Burns, Tom/Stalker, George M.* (1961): The Management of Innovation. London (Tavistock).
- Chandler, Alfred D. Jr.* (1962): Strategy and Structure: Chapters in the History of the American Industrial Enterprise. Cambridge, Mass. London (The M.I.T. Press).
- Fröbel, Volker/Heinrichs, Jürgen/Kreye, Otto* (1977): Die neue internationale Arbeitsteilung. Reinbek b. Hamburg (Rowohlt) [Trans.: The New International Division of Labour, trans. by *Burgess, P.*, Cambridge (Cambridge University Press)].
- Gagsch, Siegfried* (1980): Subsystembildung. In: *Grochla, E.* (ed.): Handwörterbuch der Organisation. 2nd ed., Stuttgart (Poeschel), 2156-2171.
- Gaitanides, Michael* (1983): Prozeßorganisation. München (Vahlen).
- Kern, Horst/Schumann, Michael* (1984): Das Ende der Arbeitsteilung? München (Beck).
- Kieser, Alfred/Kubicek, Herbert* (1983): Organisation. 2nd ed., Berlin/New York (de Gruyter).
- Kosiol, Erich* (1976): Organisation der Unternehmung. 2nd ed., Wiesbaden (Gabler) [1st ed. 1962].
- Krüger, Wilfried* (1981): Aufgabenanalyse: Renaissance einer Organisationstechnik. In: Zeitschrift für Organisation, 50: 185-198.
- Lawrence, Paul R./Lorsch, Jay W.* (1969): Organization and Environment. Homewood, Ill. (Irwin).
- Meier, Albert* (1957): Rationelle Führung und Leitung in der Unternehmung. Stuttgart (Poeschel).
- Mintzberg, Henry* (1979): The Structuring of Organizations. Englewood Cliffs, N.J. (Prentice-Hall).
- Nordsieck, Fritz* (1934): Grundlagen der Organisationslehre. 1st ed., Stuttgart (Poeschel) [2nd ed. 1955: "Rationalisierung der Betriebsorganisation"].
- Nordsieck, Fritz* (1961): Betriebsorganisation. 1st ed., Stuttgart (Poeschel) [4th ed. 1972].

Osterloh, Margit (1986): Industriesoziologische Vision ohne Bezug zur Managementlehre? In: Die Betriebswirtschaft, 46: 610-624.

Picot, Arnold/Reichwald, Ralf (1987): Bürokommunikation. 3rd ed., Hallbergmoos near Munich (AIT-Verlag).

Schmoller, Gustav (1900): Grundriß der Allgemeinen Volkswirtschaftslehre. Leipzig (Duncker & Humblot).

Schmittenhaus, Otto (1951): Allgemeine Organisationslehre. Berlin (Duncker & Humblot).

Stefanic-Allmayer, Karl (1950): Allgemeine Organisationslehre. Wien/Stuttgart (Humboldt).